Observations on the Loss of Verb Second in the History of English

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To appear in: C.J.W. Zwart and W. Abraham (eds.). 2002. *Studies in Comparative Germanic Syntax*. Amsterdam: John Benjamins.

1. INTRODUCTION

As often observed in the literature (cf. e.g. van Kemenade 1987, Stockwell 1984), Old English (OE) has word order patterns which are reminiscent of the Verb Second (V2) phenomenon found in the modern Germanic languages. In particular, fronting of some element to clause-initial position often leads to subject-verb inversion and, hence, to the occurrence of the finite verb in second position. This word order property is illustrated in (1).[1]

(1) a. [ðæs halgan weres stefne] **gehyrde** *Theoprobus* þa (Gregory H, 140.17.140.30)
the holy man's voice heard Theoprobus then
'Theoprobus then heard the holy man's voice.'

b. [þinre meder] **geheolp** *þin halga geleafa* (Ælfric's Lives of Saints, I, 212.28)
your mother helped your holy faith
'Your holy faith helped your mother.'

c. And [egeslice] **spæc** *Gregorius* be ðam … (Wulfstan, 202.46)
And sternly spoke Gregorius about that
'And Gregorius spoke sternly about that …'

d. [On þæm dagum] **wæs** *Alexander* geboren on Crecum … (Orosius, 104.21)
In those days was Alexander born in Greece
'At that time, Alexander was born in Greece …'

In (1a) an accusative object is fronted to initial position, in (1b) a dative object, in (1c) a manner adverb and in (1d) a temporal PP adjunct. In all these cases, the fronting of a consituent goes together with subject-verb inversion as in the modern Germanic V2 languages. In Modern English, the corresponding word orders would be ungrammatical. V2 patterns therefore seem to have been lost in the history of English and this loss is an issue which has received considerable attention in the literature (cf. e.g. Fuss 1998, van Kemenade 1987, Kroch et al. 2000, Lightfoot 1995, 1997, Platzack 1995, Roberts 1993, Stockwell 1984). However, the discussions in the literature raise two main problems. First of all, detailed data describing the change are rare. And secondly, no satisfactory explanation has been found so far as to why this change occurred.

The main goal of this paper is to make a contribution to the first point (for the second issue, cf. Haeberli 2000). More particularly, I will discuss the status of subject-verb inversion in various prose texts from the Old and Middle English periods in order to provide a general

* Parts and earlier versions of the material discussed here were presented at the 6th Diachronic Generative Syntax Conference (University of Maryland, May 2000), the 15th Comparative Germanic Syntax Workshop (University of Groningen, May 2000) and at the 11th International Conference on English Historical Linguistics (University of Santiago de Compostela, September 2000). I would like to thank the audiences at theses presentations for their valuable comments and suggestions. All remaining errors are my own responsibility.

1 If no secondary source is cited, the OE data are taken from the "Brooklyn-Geneva-Amsterdam-Helsinki Parsed Corpus of Old English", a syntactically and morphologically annotated version of selected OE prose text samples from the Helsinki Corpus of English Texts. For more information on this corpus and for the detailed references to the OE texts cf. http://www-users.york.ac.uk/~sp20/corpus.html.

picture of how V2 was lost in the history of English. The paper is organized as follows. Section 2 presents some general aspects of the syntax of OE which will allow us to determine exactly what was lost in the history of English with respect to the syntax of V2. Section 3 then deals with subject-verb inversion in OE in more detail. In section 4, the status of V2 in Middle English (ME) is discussed. Finally, section 5 concludes the paper.

2. WHAT WAS LOST?

Before we start our discussion of the loss of V2 in English, some remarks concerning the syntax of the earliest attested period of English, i.e. Old English, are necessary so that we can determine exactly what was lost in the course of the history of English. In the literature on the syntax of OE, two V2 contexts have generally been distinguished (cf. e.g. van Kemenade 1987, Pintzuk 1991): (i) V2 in the context of operator fronting (i.e. with *wh*-elements, negation but also some adverbs which are not typically operators such as *þa* ('then'), *þonne* ('then') and *nu* ('now')); (ii) V2 in the context of non-operator fronting. This distinction is based on the different behavior of pronominal subjects in the two contexts and in the recent literature context (i) has generally been analyzed as involving V-movement to C whereas context (ii) has been analyzed as involving V-movement to an inflectional head below C (cf. e.g. Cardinaletti and Roberts 1991, Haeberli to appear, Hulk and van Kemenade 1997, Kroch and Taylor 1997, Pintzuk 1991, 1993).

What is important for our purposes here is that in context (i) we still can find what has been referred to as "residual V2" in Modern English (cf. e.g. *When will John leave?*). Fronting of interrogative or negative constituents leads to fronting of a verbal element to the left of the subject. The main difference between OE and Modern English is that the fronted verbal element cannot be a main verb any more in Modern English, but this restriction is the consequence of a more general development affecting the movement properties of main verbs (cf. e.g. Kroch 1989) rather than a substantial change concerning the syntax of V2. The crucial context for changes in the V2 syntax of English is therefore context (ii) in which a non-operator is fronted, as illustrated in the examples in (1) above. The Modern English equivalents of these examples would be ungrammatical even if an auxiliary followed the fronted non-operator. Thus, what was lost in the history of English is the frequent occurrence of V2 patterns when a non-operator is fronted.[2]

However, not all cases in which a non-operator is fronted are relevant for our purposes. As often discussed in the literature (cf. e.g. van Kemenade 1987, Pintzuk 1991), subject-verb inversion generally does not occur when the subject is pronominal. This is illustrated in (2).

(2) a. [þæt] *þu* **meaht** swiðe sweotole ongitan (Boethius, 88.14)
that you can very easily understand

b. and [mid gelæredre handa] *he* **swang** þone top mid swa micelre swiftnesse (Apollonius, 20.13.22)
and with skilful hand he swang the top with such great swiftness

In (2a) an object is fronted and in (2b) an adjunct PP occupies the clause-initial position, but in both cases no subject-verb inversion occurs. The word orders in (2) therefore correspond to

[2] One type of non-operator in clause-initial position, i.e. the subject, of course still frequently occurs in orders in which the finite verbal element occurs in second position in Modern English (e.g. *John left*). Similarly, many V2 clauses in OE are of the type 'SU-V'. In this type of clause, we can therefore again not observe any developments in the surface word order patterns in the course of the history of English and they are therefore not directly relevant for our purposes here. Thus, the term 'non-operator' used in the text refers to non-subject non-operators.

surface word orders found in Modern English. Given the systematic lack of subject-verb inversion with pronominal subjects in OE already, clauses with subject pronouns do not undergo any substantial changes in the history of English (but cf. section 4 below for some additional observations on this point). Hence, the diachronic developments which are of interest to us only concern clauses with non-pronominal, i.e. full DP, subjects.

Finally, a general point concerning the notion of V2 should be made here. In the examples we have considered so far (cf. 1), subject-verb inversion leads to V2 orders because only one constituent has been moved to the beginning of the clause. However, it is not the case that subject-verb inversion always leads to V2 in OE. Instead, two (or more) constituents can sometimes precede the finite verb. Two illustrations are given in (3).

(3) a. [On þæm dagum] [on Tracia þæm londe] **wæron** *twegen cyningas* ymb þæt rice winnende (Orosius, 114.15)
In those days in Thrace the land were two kings about that kingdom fighting
'In those days, in Thrace, two kings were quarrelling about that kingdom.'

b. [Đysne yrming] [æfter his forðsiðe] **wurðodon** *þa hæðenan* eac for healicne god (Wulfstan, 223.58)
This poor-wretch after his decease worshiped the heathens also instead-of high God
'After his decease, the heathens also worshiped this poor wretch instead of God.'

Although such examples are not very frequent and V2 is the standard pattern in subject-verb inversion contexts, they nevertheless suggest that the V2 syntax is not very rigid in OE.[3] This observation will be confirmed in the following section. The term "loss of V2", as generally used in the literature, therefore might be slightly misleading in the sense that a V2 syntax as we know it from the modern Germanic languages never existed in the attested periods of English (cf. also the patterns in example 2 and section 3 below). It therefore seems more adequate to describe the developments in the history of English as the loss of certain subject-verb inversion patterns and the concomitant loss of V2 orders. In the remainder of this paper, I will therefore use the more general term of 'subject-verb inversion' rather than V2, thereby implying that, although most of these constructions are at the same time V2 structures, they may also occasionally involve the presence of two non-subjects to the left of the finite verb.

In conclusion, the main issue that arises with respect to the loss of V2 in the history of English is the question how subject-verb inversion was lost in clauses containing a fronted non-operator and a non-pronominal subject. In the remaining sections I will therefore focus on the status of such constructions throughout the history of English and more particularly during the OE and ME periods.

3. OLD ENGLISH

As observed in the previous section, subject-verb inversion in contexts of non-operator fronting generally only occurs if the subject is a full DP in OE. However, even if the subject meets this condition, subject-verb inversion is by no means categorical. This is shown in (4).

(4) a. [ðone] *Denisca leoda* **lufiað** swyðost (Wulfstan, 223.54)
that Danish people love most

[3] The question that the examples in (3) raise is what the status of such multiple topics is in OE, i.e. whether they occur in specific contexts and how they can be analyzed in theoretical terms. I will return to these issues in future research.

'The Danish people love that one most'

b. [Eallum frioum monnum] *ðas dagas* **sien** forgifene (Laws 2, 78.43)
All free persons these days be given
'These days should be given to every free person'

c. ge [eac] [hwilum] *þa yflan* **bioð** ungerade betwuh him selfum (Boethius, 134.26)
and also sometimes the evil are discordant between them selves
'And sometimes the evil people are also discordant among themselves'

d. [æfter þan] *þæt lond* **wearð** nemned Natan leaga (Chronicle A, 14.508.1)
after that that land was named Natan lea
'After him, that land was called Netley.'

Although the occurrence of patterns like (4) has sometimes been observed in the literature (cf. e.g. Allen 1990:150, Bean 1983:62/81, Haeberli & Haegeman 1995:85, Kroch & Taylor 1997:304), no attention has generally been paid to them in the theoretical analyses of OE word order (cf. e.g. van Kemenade 1987). However, as already shown by Koopman (1998), the word order patterns shown in (4) do occur quite frequently. Table 1 below provides some quantitative data concerning subject-verb inversion in clauses containing a fronted non-operator and a non-pronominal subject in ten text samples taken from the "Brooklyn-Geneva-Amsterdam-Helsinki Corpus of Old English".

Table 1 *Main clauses with non-operators preceding non-pronominal subjects in samples of ten OE texts*[4]

text (date)	*inversion (XP-V-SU)*	*no inversion (XP-SU-V)*	*% uninverted*
Bede (<950)	21	21	50.0%
Boethius (<950)	37	14	27.5%
Chronicle A (<950)	152	32	17.4%
Gregory (ms. C, <950)	17	25	59.5%
Orosius (<950)	52	34	39.5%
Ælfric's Letters (>950)	43	9	17.3%
Ælfric's Lives of Saints (>950)	26	13	33.3%
Apollonius (>950)	28	5	15.2%
Gregory (ms. H, >950)	23	15	39.5%
Wulfstan (>950)	67	20	23.0%
Total	466	188	**28.7%**
Total (before 950)/ Without Chronicle A	279/ 127	126/ 94	**31.1%/ 42.5%**[5]
Total (after 950)	187	62	**24.9%**

The figures in Table 1 show that the frequencies of non-inversion are by no means negligible. Non-inversion occurs in 15.2% (Apollonius) to 59.5% (Gregory C) of all main clauses in which a non-operator is fronted and the subject is a full DP.

Some additional observations should be made with respect to the data in Table 1. First of all, it could be argued that clauses which lack subject-verb inversion are actually V-final main clauses. Although V-final orders are most frequent in subordinate clauses, they do occur in main clauses (cf. e.g. Koopman 1995) and it could be assumed then that such clauses remain V-final (and hence lack inversion) even if a non-operator is fronted.[6] However, the V-final option does not provide a likely explanation for the frequent occurrence of non-inversion in the data in Table 1. As it has often been pointed out, V-final main clauses are particularly frequent in coordinate clauses (cf. e.g. Mitchell 1985:710ff.), and the figures in Table 1 include such clauses (cf. example 4c). We therefore would be expect that, since coordinate clauses favor V-final order, statistical data based on non-coordinated main clauses only should

[4] Dates of composition (before/after 950) based on Pintzuk (1991:381ff.). The figures for the Chronicle do not include sentences with clause-initial *her* since the high number of such sentences would lead to a certain distortion of the general picture (total of clauses of this type: 234; inversion: 80; non-inversion 154). Clauses in which only an adjunct clause precedes the subject are not counted. Adjunct clauses generally do not trigger inversion in OE.

[5] The figure without the Chronicle A is given because the number of relevant examples in this text is considerably higher than in the other ones that are considered in this table and this text (and its (non-)inversion pattern) therefore weighs more heavily in the totals than the other texts. This problem could also be avoided by calculating the average of the different percentages instead of calculating the percentages based on the total numbers. In this way, we would obtain the following results: average percentage for all ten texts: 32.3%; average percentage for the five early texts: 38.8%; average percentage for the five later texts: 25.7%.

[6] As for the occurrence of constituents to the right of the finite verb, it could be analyzed in terms of extraposition, a process which has been postulated in many analyses of OE syntax (cf. e.g. van Kemenade 1987, Pintzuk 1991).

show significantly lower frequencies of non-inversion if V-final order indeed was a crucial factor favoring the lack of subject-verb inversion.

However, this expectation is not borne out. Once we exclude all main clauses introduced by the conjunction 'and' from the data in Table 1, the frequencies of non-inversion for the individual texts change only slightly and the change can be either a decrease or an increase.[7] The figures from all OE texts taken together give a frequency of non-inversion of 30.6% in non-coordinated clauses (vs. 28.7% in Table 1). In the texts before 950, we obtain a frequency of 34.3% or 40.3% without the Chronicle (vs. 31.1% and 42.5% respectively in Table 1). Finally in the later texts, the frequency of non-inversion is 26.1% (vs. 24.9% in Table 1).[8] Thus, coordination and, hence, V-final orders do not seem to be crucial for the occurrence of non-inversion in OE.

This conclusion is confirmed by some quantitative data provided by Koopman (1995:139) and Pintzuk (1993:22, fn. 22). These authors estimate that the frequency of V-final orders in non-coordinated main clauses is not more than 6% of all main clauses. As just shown, the frequency of non-inversion in non-coordinated main clauses is around 30% and thus considerably higher than 6%. This clear contrast would be unexpected if non-inversion was closely related to V-final orders. In conclusion, both the irrelevance of coordination and the contrast in frequency between V-final orders and non-inversion in non-coordinated clauses suggest that the frequent lack of inversion in non-operator fronting contexts is not simply a consequence of the availability of V-final orders in OE. Instead, there seems to be genuine optionality as to whether or not subject-verb inversion takes place when a non-operator is fronted, with inversion being the more frequently used option.

Let us now turn to a different issue that Table 1 raises. Given that subject-verb inversion in the contexts considered here is a word order option which was lost in the history of English, we may wonder whether this loss already was under way in the OE period, i.e. whether there was a decrease of inversion. As a matter of fact, the data in Table 1 suggest that this was not the case. If anything happened during the OE period, it rather seems to be a strengthening than a weakening of subject-verb inversion constructions. Thus, the average frequency of non-inversion in the earlier texts (before 950) is around 10% higher than in the later texts (after 950) (cf. Table 1 and footnotes 5 and 8). This looks like a development towards a more rigid V2 grammar during the OE period. However, such a conclusion will have to be confirmed by further research based on larger text samples and a larger number of texts.

Finally, Table 1 raises an additional issue. As observed above, the data in Table 1 suggest that there is optionality as to whether fronting of a non-operator leads to subject-verb inversion or not. However, inversion is still the clear majority pattern in OE. The question that arises then is whether any factors can be identified which determine the occurrence of non-inversion. At first sight, it is not clear that the answer to this question is positive (cf. also Koopman 1998:145ff.). For example when we consider the type of fronted element in non-inversion constructions, we can observe that non-inversion occurs most frequently with fronted adjuncts (adverbs, PPs). However, fronted arguments also regularly do not give rise to subject-verb inversion. In the text samples studied here, 130 clauses contain a fronted object and in 22 cases (16.9%) non-inversion occurs (cf. also Koopman 1998:136 for additional

[7] The exact percentages are the following: Bede 48.6% (vs. 50.0% in Table 1), Boethius 22.5% (27.5%), Chronicle A 17.9% (17.4%), Gregory C 55.9% (59.5%), Orosius 38.6% (39.5%), Ælfric's Letters 13.3% (17.3%), Ælfric's Lives of Saints 38.2% (33.3%), Apollonius 15.4% (15.2%), Gregory H 36.1% (39.5%), Wulfstan 27.6% (23.0%).

[8] The average frequencies would be the following: all texts 31.4% (vs. 32.3%, cf. fn. 5 above); early texts 36.7% (vs. 38.8%, cf. fn. 5); later texts 26.1% (vs. 25.7%, cf. fn. 5).

data).[9] As for the type of subject involved in non-inversion constructions, we can observe that it tends to be relatively "light". Thus, in 55 out of the 188 non-inversion clauses the subject consists of a single word (generally a name) and in 68 clauses the subject consists of two words (i.e. 64.9% of the subjects are either one or two word subjects.). Yet, the lack of this property again does not mean that non-inversion is impossible. Heavier subjects also can occur in such constructions, as the examples in (5) show.

(5) a. [þa] [æfter þære mæssan] *seo modor and seo dohtor* **astrehton** hi on gebedum …
(Ælfric's Lives of Saints, I, 210.20)
then after the mass the mother and the daughter prostrated themselves in prayers…

b. [Eac] [on þam ylcan timan] *sum preost Aquinensis þære cyricean* **wearð** gedreht mid deofolseocnysse. (Gregory H, 134.16.134.22)
Also at the same time some priest Aquinensis of-the church became tormented by demoniacal possession

Thus, simple distinctions like argument vs. adjunct fronting or heaviness of subject do not provide any simple answers to the question as to when subject-verb inversion does not apply in OE. However, an analysis based on more fine-grained distinctions and the use of more sophisticated statistical tools may identify certain factors which at least favor the occurrence of non-inversion in a significant way. I will leave this issue for future work.

In summary, we have seen that already in OE there is a substantial number of clauses with a fronted non-operator and a full DP subject which do not exhibit subject-verb inversion. It is therefore not entirely adequate to talk about the "loss of V2" in English since there is no attested period in the history of this language during which it had the properties of a typical V2 language (cf. also section 2). However, subject-verb inversion is the clear majority pattern in clauses with a non-pronominal subject and a fronted non-operator in OE.

4. MIDDLE ENGLISH

Let us now consider the development of subject-verb inversion after the OE period. The situation in Early Middle English (EME) is still comparable to that found in OE. Kroch and Taylor (1997:311) discuss the frequencies of subject-inversion in seven texts from the early 13th century. These frequencies show that, as in OE, inversion is still predominant with full DP subjects when a non-operator is fronted. If all of Kroch and Taylor's figures for the different texts are taken together, we obtain a frequency of non-inversion of 28.6%. This figure is very close to the figure given in Table 1 for the total numbers obtained from the different OE texts (28.7%). Hence, the status of subject-verb inversion does not seem to have changed substantially yet at the beginning of the Middle English (ME) period.

However, during the ME period the frequency of inversion in contexts of non-operator fronting decreases rapidly. Van Kemenade (1987:183ff.) therefore suggests that V2 starts being lost by around 1400. This observation is confirmed to a large extent by the quantitative data in Table 2 obtained from the Penn-Helsinki Parsed Corpus of Middle English.[10] Table 2 gives the numbers and frequencies for the (non-)occurrence of subject-verb inversion in

[9] These counts exclude cases with a clause-initial object and a resumptive element within the clause given that in such configurations subject-verb inversion also does not occur in the modern Germanic V2 languages.

[10] The Penn-Helsinki Parsed Corpus of Middle English is a syntactically annotated version of ME prose text samples from the Helsinki Corpus of English Texts. The data in this paper are based on the first version of the Penn-Helsinki corpus (PPCME1). For more information on this corpus and for the detailed references to the ME texts cf. http://www.ling.upenn.edu/mideng.

clauses with a fronted non-operator and a full DP subject in samples from 33 ME prose texts from the 14th and 15th centuries.[11, 12] The ranking is based on the frequency of non-inversion, the texts at the top being those with the highest frequencies of non-inversion (i.e. those in which the change has advanced most).

[11] All the text samples from PPCME1 which contain more than 25 main clauses with a constituent preceding the subject are included in the table. The dates given for the different texts are taken from the Helsinki Corpus manual (cf. Kytö 1993). Clauses in which only an adjunct clause precedes the subject are not counted. Furthermore, cases of subject-verb inversion in which the equivalents of OE *þa/þonne* ('then') or *nu* ('now') occur in initial position are not included in the figures in Table 2. These elements tend to behave like operators in OE and might still do so in ME.

[12] Between the EME data discussed by Kroch & Taylor (1997) and the data in Table 2, there is a gap of around 100 years (i.e. between 1250 and 1350). This is due to the fact that prose texts are generally lacking from this period (cf. e.g. Allen 1995:385 for the 14th century). It is therefore not possible to obtain an entirely coherent picture for the decrease of subject-verb inversion in the ME period.

Table 2 *Main clauses with non-operators preceding non-pronominal subjects in samples of texts from the late 14th and the 15th century – type I*

text (date)	*no inversion*	*inversion*	*% uninverted*
Purvey, Prologue to the Bible (c1388)	29	1	**96.7%**
Old Testament (a1425)	107	6	**94.7%**
Life of St. Edmund (c1450 (1438))	56	5	**91.8%**
New Testament (c1388)	96	11	**89.7%**
Documents (1380-1420)	64	12	**84.2%**
Mirk's Festial (a1500 (a 1415))	28	6	**82.4%**
Trevisa, Polychronicon (a1387)	72	21	**77.4%**
Malory, Morte Darthur (a 1470)	82	26	**75.9%**
Book of Margery Kempe (c1438)	35	13	**72.9%**
In Die Innocencium (1497)	26	10	**72.2%**
Phlebotomy (c1400-1425)	18	7	**72.0%**
Gregory's Chronicle (c1475)	59	24	**71.1%**
ME Sermons, ms. Royal (c1450 (c1415))	33	15	**68.8%**
Siege of Jerusalem (c 1500)	47	22	**68.1%**
Caxton, Prologues/Epilogues (1477-1484)	19	9	**67.9%**
Hilton, On Perfection (a1450 (a1396))	23	11	**67.6%**
Private letters (1448-1480)	48	23	**67.6%**
Julian of Norwich (c1450 (c1400))	25	14	**64.1%**
Wycliffite Sermons (c1400)	122	70	**63.5%**
Rolle, Prose Treatises (c1440 (a1349))	20	13	**60.6%**
Capgrave's Chronicle (a1464)	54	36	**60.0%**
Brut (c1400)	34	26	**56.7%**
Cyrurgie of Guy de Chauliac (?c1425)	18	14	**56.3%**
Fitzjames, Sermo Die Lune (?1495)	19	22	**46.3%**
Cloud of Unknowing (a1425 (?a1400))	30	33	**44.4%**
Chaucer (c 1380-1390)	64	85	**43.0%**
Vices and Virtues (c1450 (c1400))	15	24	**38.5%**
Earliest English Prose Psalter (c1350)	24	58	**29.3%**
Mandeville's Travels (?a1425 (c1400))	15	38	**28.3%**
Robert Reynes (1470-1500)	14	38	**26.9%**
Caxton, Reynard the Fox (1481)	8	26	**23.5%**
Mirror of St. Edmund, ms. Thornton (c1440 (?1350))	17	63	**21.3%**
Mirror of St. Edmund, ms. Vernon (c1390)	13	84	**13.4%**

In 23 out of the 33 texts listed in Table 2, the frequency of non-inverision is above 50%. By the 15th century, inversion in contexts of non-operator fronting has thus become a minority pattern, although there is still considerable variation among the different texts which does not seem to be of a clear dialectal or chronological nature.

With respect to the percentages in Table 2, it is important to note that the frequency of non-inversion is not expected to reach 100% during the history of English. Sentences in which a non-operator is fronted and the subject follows the finite verb still can be found in Modern

English. Some typical contexts are shown in (6) (examples from Bresnan 1994:78, Schmidt 1981:6/8/9, Stockwell 1984:581)).

(6) a. [Plainly detectible] **were** *the scars from his old football injury*.
b. [Stolen] **were** *all of the newlyweds' gifts*.
c. [Across the river] **lived** *seven dwarfs*.
d. [In this rainforest] **can** be found *the reclusive lyrebird*.
e. [Thus] **ended** *his story*.
f. [In the year 1748] **died** *one of the most powerful of the new masters of India*.

In (6a/b), a predicate is fronted and finite *be* precedes the subject. Examples (6c/d) are cases of locative inversion. And (6e/f) illustrates inversion with certain adjuncts such as *thus* or point time adverbials. The contexts shown in (6) are also frequent contexts for inversion in 14th and 15th century ME already, as the examples in (7) illustrate.

(7) a. [bettur] **is** *schort payne* þen longe. (Siege, 86.514)
b. [blessed] **be** *God*! (Brut, 221.409)
c. And [before the Emperoures table] **stonden** *grete lordes & riche barouns & othere.* (Mandeville, 143.317)
d. for [in þe serkil] **was** writin *hir name*. (Capgrave, 210.19)
e. [thus] **endeth** *the book named Proloconycon…* (Caxton, Prologues, 41.582)
f. [Þat **Ȝ**ere] **deide** *þat worthy man Beda þe preost*. (Polychronicon, VI, 219.77)

Given that the constructions in (6) still occur in Modern English, it is not surprising that very similar constructions also can be found at the time when subject-verb inversion is generally on its decline. Hence, what may be more revealing for determining the status of subject-verb inversion in ME is to count only those cases of inversion which have disappeared in the history of English, i.e. to exclude the constructions shown in (7). I will call these cases Type II inversion (vs. Type I which includes the constructions in 7). The quantitative data for Type II inversion are given in Table 3.[13]

[13] Table 3 excludes inversions occurring in typical Modern English inversion contexts as shown in (6)/(7) (i.e.: fronted predicate with finite *be* (a/b); fronted locative with a subject following an unaccusative/passive predicate or *be* (c/d); clause-initial *thus* or point time adverbs with unaccusative verbs (e/f)). This list is not meant to be exhaustive for Modern English inversion contexts but it simply covers contexts which can be found fairly regularly in ME. It is therefore not impossible that the figures for inversion in Table 3 still contain some cases of inversion which are not entirely ruled out in Modern English.

One context which is not mentioned in the text is quotative inversion (*"…", said John*). The reason for this is that I excluded quotative inversion in Table 2 already because the status of quotative inversion is not entirely straightforward. Consider for example the following sentence.

(i) 'Syre,' *seide* **Moises**, '**Ȝ**if men aske how men clepeþ **Ȝ**ow, what schal I seye?' (Vices, 101.88)

At the surface, the inversion in (i) looks like a parenthetical V1 clause rather than like a genuine example in which subject-verb inversion occurs due to the fronting of a non-operator. Hence, it is not clear whether the status of quotative inversion is entirely on a par with the other clauses counted in Tables 2 and 3 and I already omitted this construction for Table 2.

Table 3 *Main clauses with non-operators preceding non-pronominal subjects in samples of texts from the late 14th and the 15th century – type II*

text (date)	*no inversion*	*inversion*	*% uninverted*
Old Testament (a1425)	107	1	**99.1%**
Life of St. Edmund (c1450 (1438))	56	1	**98.2%**
Purvey, Prologue to the Bible (c1388)	29	1	**96.7%**
New Testament (c1388)	96	4	**96.0%**
Mirk's Festial (a1500 (a 1415))	28	2	**93.3%**
Documents (1380-1420)	64	7	**90.1%**
Trevisa, Polychronicon (a1387)	72	9	**88.9%**
Malory, Morte Darthur (a 1470)	82	14	**85.4%**
Book of Margery Kempe (c1438)	35	6	**83.3%**
Caxton, Prologues/Epilogues (1477-1484)	19	4	**82.6%**
Brut (c1400)	34	8	**81.0%**
Gregory's Chronicle (c1475)	59	14	**80.8%**
Capgrave's Chronicle (a1464)	54	13	**80.6%**
Rolle, Prose Treatises (c1440 (a1349))	20	5	**80.0%**
Siege of Jerusalem (c 1500)	47	12	**79.7%**
In Die Innocencium (1497)	26	7	**78.8%**
Private letters (1448-1480)	48	13	**78.7%**
ME Sermons, ms. Royal (c1450 (c1415))	33	9	**78.6%**
Phlebotomy (c1400-1425)	18	5	**78.3%**
Hilton, On Perfection (a1450 (a1396))	23	8	**74.2%**
Julian of Norwich (c1450 (c1400))	25	11	**69.4%**
Cyrurgie of Guy de Chauliac (?c1425)	18	8	**69.2%**
Wycliffite Sermons (c1400)	122	62	**66.3%**
Mandeville's Travels (?a1425 (c1400))	15	9	**62.5%**
Cloud of Unknowing (a1425 (?a1400))	30	19	**61.2%**
Robert Reynes (1470-1500)	14	13	**51.9%**
Fitzjames, Sermo Die Lune (?1495)	19	18	**51.4%**
Chaucer (c 1380-1390)	64	64	**50.0%**
Earliest English Prose Psalter (c1350)	24	28	**46.2%**
Vices and Virtues (c1450 (c1400))	15	22	**40.5%**
Mirror of St. Edmund, ms. Thornton (c1440 (?1350))	17	31	**35.4%**
Caxton, Reynard the Fox (1481)	8	15	**34.8%**
Mirror of St. Edmund, ms. Vernon (c1390)	13	48	**21.3%**

Once the Modern English inversion contexts in (6) are not included, we obtain frequencies of non-inversion which are above 50% in 28 out of the 33 text samples. In 19 text samples, the frequency of non-inversion is even above 75%.

The ME data in Tables 2 and 3 show that by the 15th century subject-verb inversion has become a clear minority pattern and the OE/EME system in which subject-verb inversion was predominant in contexts of non-operator fronting is being lost. Two main questions arise now: (i) Are there any specific contexts in which the remaining instances of subject-verb inversion occur in the late ME texts? (ii) Are there any explanations for the frequency differences

between the various texts (cf. e.g. Edmund, ms. Vernon (c1390) 21.3% non-inversion vs. Purvey/New Testament (c1388) 96%)?

With respect to the first question, the following main observations can be made. First of all, if we consider the remaining instances of subject-verb inversion in the two texts which have the highest frequency of non-inversion in Table 3, we can observe that they both involve a passive construction. The two examples are given in (8).

(8) a. [Forsothe] [to Adam] **was** not foundun *an helpere lijk hym*. (OTest, II, 20G.97)
b. And [in this maner] **was** *bothe hys shurte and hys breche* imade (Life of St. Edmund,166.99)

In (8a) and (8b), a non-operator is in clause-initial position while the subject either follows both the finite auxiliary and the participle (8a) or it occurs between the two verbal elements (8b). Such constructions can also be found with a fairly high percentage among Type II inversions in other text samples such as the *New Testament* (1 passive construction out of 4 Type II inversions), *Documents* (3/7), *Polychronicon* (4/9), *Malory* (3/14), *Gregory* (11/14), *Capgrave* (5/13), *In Die Innocencium* (4/7), *Private Letters* (5/13), *ME Sermons* (4/9), *Brut* (4/8), *Hilton* (3/8), *Julian of Norwich* (4/11), *Cyrurgie* (4/8), *Mandeville* (3/9) or *Cloud* (5/19). Thus, it seems that passive constructions favor the occurrence of the subject in a low structural position and hence in a position which follows the finite verb. In some other texts, some other preferences with respect to the verbal context can be observed in inversion contexts. For example, the presence of copula *be* frequently gives rise to inversion in *Siege* (8/12) and *Mandeville* (4/9), whereas clauses containing a finite modal often exhibit inversion in *Mirk* (2/2), *Kempe* (5/6), *Wycliffite Sermons* (13/62), *Cloud* (7/19), *Vices* (6/22). However, as the examples in (9) to (11) below will show, inversion can be found in any kind of context, in particular also with transitive verbs.

With respect to the fronted element, inversion occurs in various contexts. In (9), different types of adverbs are fronted.

(9) a. And [þerfore] **saide** *Maister Arnalde* þat he … (Cyrurgie, 577.217)
b. [Wonderfuly] **is** *a mans affeccion* varied in goostly felyng of þis nouȝt… (Cloud, 122.588)
c. and [sone þerafter] **were** *messangers* i-sent to Avyon to þe pope (Polych, 352.410)
d. and [oftentyme] **deyn** *men* (Reynes,160.104)

Furthermore, subject-verb inversion also can be found with various types of PP adjuncts.

(10) a. And [accordyng to the same] **saith** *Salamon* that the nombre of foles is infenyte. (Caxton, Prologues, 11.3)
b. [So] [with that] **departed** *the damesell* (Malory, 47.92)
c. [In þis wyze] **bene** *all good levers* called þe frendes of God (ME Sermons, 16.74)
d. [In this] **wille** *oure lorde* that … (Julian, 62.330)
e. [Fro þat place] **was** *þe king* led to London to þe Tour. (Capgrave, 213.71)
f. But [at þe deth of Cryst] **was** *Tyberyis* Emparowr of Rome (Siege, 73.90)
g. [In þis ȝere, in þe seuene day of May], **cam** *þe Emperor Sigemund* to London (Capgrave, 247.376)

And finally, fronting of an argument also can trigger subject-verb inversion in many of the ME text samples listed in Tables 2 and 3.

(11) a. [This] **seith** *Austyn* there. (Purvey, I,56.108)
b. [Thyse wordes] **sayd** *our sauyour Ihu Cryst* of the temple of his holy body. (Fitzja, A5V.82)
c. and [muche sorow] **had** *sir Gawayne* to avoyde his horse (Malory, 201.420)
d. [Of þese men] **spekiþ** *Seynt Petir* þus: … (Hilton, 14.99)

But many of the fronted non-operators which give rise to inversion in the examples in (9) to (11) also can be found (sometimes in the same text) in clauses in which no subject-verb inversion has taken place. This is shown in (12).

(12) a. And [þerfore] *the lore and þe manere of knowynge of symple þinges* **is** ȝeuen of Galien in þe firste bokes of Symple Medecynes … (Cyrurgie, 576.193)
b. and [sone þerafter] *þe schap of þe cros* **was** i-seie forsake þe baner … (Polychronicon, VIII, 89.204)
c. [Wyth that] *sir Raynolde* **gan** up sterte … (Malory, 200.370)
d. [at þe tyme of his passion] *Pylat* **send** hyme to Herrode (Siege, 76.152)
e. Eke [in þis ȝere] *Thomas, duke of Clarens,* **cam** hom fro Gian (Capgrave, 238.174)
f. [This þingis] *God* **send** to hyme for þis cavssys, (Siege, 73.83)

In (12a), the adverb 'therefore' has been fronted but does not trigger subject verb inversion whereas in (9a) inversion takes place in the same text. Similar variation can be found in (12b) to (12e) (identical or similar fronted non-operators as in 9c, 10b, 10f, 10g in the same texts) and in (12f) (similar fronted object as in 11b but in a different text). The data in (9) to (12) thus suggest that, with respect to the type of fronted non-operator, there is no clearly identifiable factor which determines the presence or absence of subject-verb inversion in ME. However, as pointed out already in our discussion of OE (section 3), it may be that by using more detailed statistical evidence and tools some factors can be identified which at least favor the occurrence of inversion. I will return to this issue in future work.

Let us finally consider the status of the subject in subject-verb inversion constructions in ME. Again, the general observation based on data like those in (9) to (11) is that subject-verb inversion is not simply restricted to some specific type(s) of subject. Although most subjects in the examples above are definite, indefinite subjects also occur in inversion constructions (cf. e.g. 9c, d). Similarly, most of the subjects in (9) to (11) are fairly light, but, not unexpectedly, heavier ones also frequently follow the finite verb (cf. e.g. 11b). Finally, it is interesting to note that the class of subjects which occur in subject-verb inversion constructions in ME even includes subject pronouns (cf. also van Kemenade 1987:198). This observation is fairly surprising from a diachronic point of view. As mentioned in section 2 and as often discussed in the literature, fronting of a non-operator generally does not lead to subject-verb inversion with pronominal subjects in OE. This observation is confirmed by the following quantiative data obtained from the text samples studied in Table 1 above (cf. also Kroch & Taylor 1997:311 for some data for EME).

Table 4 *Main clauses with non-operators preceding pronominal subjects in samples of ten OE texts*

Text (date)	*no inversion*	*inversion*[14]	*% uninverted*	*% uninverted with full DP subjects (Table 1)*
Bede (<950)	37	1	**97.4%**	**50.0%**
Boethius (<950)	91	0	**100.0%**	**27.5%**
Chronicle A (<950)	25	1	**96.2%**	**17.4%**
Gregory (ms. C) (<950)	41	0	**100.0%**	**59.5%**
Orosius (<950)	27	4	**87.1%**	**39.5%**
Ælfric's Letters (>950)	30	0	**100.0%**	**17.3%**
Ælfric's Lives of Saints (>950)	20	0	**100.0%**	**33.3%**
Apollonius (>950)	45	0	**100.0%**	**15.2%**
Gregory (ms. H) (>950)	38	0	**100.0%**	**39.5%**
Wulfstan (>950)	31	0	**100.0%**	**23.0%**

In seven out of the ten text samples in Table 4 and in all the five late texts, subject-verb inversion with a pronominal subject never occurs at all. In *Bede* and the *Chronicle*, there is one exception to the restriction on inversion with subject pronouns (but cf. fn. 14). The only text in which such inversions occur with some frequency is *Orosius* (12.9% inversion). However, the general picture that arises is that subject pronouns generally do not invert with the finite verb when a non-operator is fronted in OE.

In ME, the situation is considerably different, as Table 5 shows.

[14] The instances of inversion in Bede and the Chronicle and one out of the four inversions in Orosius involve fronted *swa* ('so'). It may therefore be that *swa* can occasionally function as an operator like the adverbs *þa/þonne* ('then') or *nu* ('now'). Yet, this conclusion has to remain speculative at this point and would have to be confirmed by a more extensive study of the syntactic behavior of *swa*.

Table 5 *Main clauses with non-operators preceding pronominal subjects in samples of texts from the late 14th and the 15th century*

text	*no inversion*	*inversion*[15]	*% uninverted*	*% uninverted with full DP subjects (type II, table 3)*
Old Testament (a1425)	46	1	**97.9%**	**99.1%**
Edmund (c1450 (1438))	72	0	**100.0%**	**98.2%**
Purvey (c1388)	25	0	**100.0%**	**96.7%**
New Testament (c1388)	103	0	**100.0%**	**96.0%**
Mirk (a1500 (a 1415))	27	1	**96.4%**	**93.3%**
Documents (1380-1420)	81	5	**94.2%**	**90.1%**
Polychronicon (a1387)	48	0	**100.0%**	**88.9%**
Malory (a 1470)	203	30	**87.1%**	**85.4%**
Kempe (c1438)	110	16	**87.3%**	**83.3%**
Caxton (1477-1484)	38	4	**90.5%**	**82.6%**
Brut (c1400)	79	6	**92.9%**	**81.0%**
Gregory's Chronicle (c1475)	59	0	**100.0%**	**80.8%**
Capgrave (a1464)	29	31	**48.3%**	**80.6%**
Rolle (c1440 (a1349))	33	6	**84.6%**	**80.0%**
Siege of Jerusalem (c 1500)	87	4	**95.6%**	**79.7%**
In Die Innocencium (1497)	32	2	**94.1%**	**78.8%**
Private letters (1448-1480)	213	18	**92.2%**	**78.7%**
Sermons (c1450 (c1415))	57	4	**93.4%**	**78.6%**
Phlebotomy (c1400-1425)	23	6	**79.3%**	**78.3%**
Hilton (a1450 (a1396))	37	8	**82.2%**	**74.2%**
Julian (c1450 (c1400))	52	14	**78.8%**	**69.4%**
Cyrurgie (?c1425)	45	2	**95.7%**	**69.2%**
Wycliffite Sermons (c1400)	73	13	**84.9%**	**66.3%**
Mandev (?a1425 (c1400))	31	1	**96.9%**	**62.5%**
Cloud (a1425 (?a1400))	169	42	**80.1%**	**61.2%**
Reynes (1470-1500)	31	0	**100.0%**	**51.9%**
Fitzjames (?1495)	31	12	**72.1%**	**51.4%**
Chaucer (c 1380-1390)	95	95	**50.0%**	**50.0%**
Earliest Psalter (c1350)	47	16	**74.6%**	**46.2%**
Vices (c1450 (c1400))	49	19	**72.1%**	**40.5%**
Edmund, Thornton (c1440 (?1350))	95	105	**47.5%**	**35.4%**
Caxton, Reynard (1481)	48	28	**63.2%**	**34.8%**
Edmund, Vernon (c1390)	126	23	**84.6%**	**21.3%**

Among the 27 text samples which exhibit Type II inversion with non-pronominal subjects relatively frequently (non-inversion below 90%), only 3 completely lack inversion with subject pronouns. In the other 24 texts, inversion with a pronominal subject can be found at least once and in general several times. Although the frequency of Type II non-inversion with

[15] Clauses with initial 'then' and 'now' are again not counted here (cf. also fn. 11).

full DP subjects is lower than non-inversion with subject pronouns in most texts,[16] the data in Table 5 nevertheless suggest that subject-verb inversion with pronouns is an option which was generally available in ME and that therefore the fairly clear-cut contrast between pronominal and non-pronominal subjects found in OE/EME has disappeared in later ME. A few illustrations of subject-verb inversion with pronominal subjects in ME are given in (13).

(13) a. [On þe same maner] **schalt** *þou* do wiþ þis lityl worde GOD. (Cloud, 78.323)
b. and [þe cherch of Lincoln] **gaue** *he* to Herry Beuforth… (Capgrave, 210.11)
c. And [herof] **am** *J* sure (Caxton Prologues, 89.186)
d. And [on a tyme] **was** *he* taken bi pirates in the see. (Fitzjames, B3R.154)
e. & [many tymes] **haue** *I* feryd þe wyth gret tempestys of wyndys (Kempe, I, 51.110)
f. And [many mervayles] **shall** *he* do (Malory, 47.79)
g. [þis question] **wolde** *I* knowe of you (Private Letters, Mull, I, 126.623)

In summary, various types of subjects occur in the remaining subject-verb inversion cases found in the late 14th and the 15th century. In particular, in contrast to OE/EME, pronominal subjects also regularly invert with the finite verb in ME.

Let us finally turn to the second question raised earlier in the context of Tables 2 and 3. As observed there, for example *The Mirror of Saint Edmund (ms. Vernon), Purvey's Prologue to the Bible* and *The New Testament* all are texts from around 1390, but while the latter two texts already have a frequency of non-inversion of 96% in Table 3, the first text only has a frequency of 21.3%. The question that arises then is why such differences in the frequency of non-inversion occur in the different text samples studied here. For reasons of space, it is not possible to consider the status of each text with respect to its frequency of subject-verb inversion here. Instead, I will focus on a few texts which have a very low frequency of non-inversion and discuss three potential factors that may play a role for these low frequencies. The three factors are the following: (i) The grammatical conditions for the loss/decrease of subject-verb inversion are not met yet; (ii) a translation with a V2 source language; (iii) grammar contact.

The details for option (i) depend on what factor can be determined which caused the loss of subject-verb inversion in the history of English. If such a factor can be identified, it would of course be very likely that at least in some of the texts with low frequencies for non-inversion the relevant conditions for the loss/decrease of inversion are not entirely met yet. This kind of explanation for certain low non-inversion frequencies is indeed possible if we adopt the analysis of the loss of subject-verb inversion in English which I proposed elsewhere (cf. Haeberli 2000). Since it would go beyond the scope of this paper to discuss this approach in any detail, I simply give its main lines here, and the reader is referred to Haeberli (2000) for arguments in favor of this approach. The basic proposal is that subject-verb inversion in contexts of non-operator fronting is possible in OE/EME because non-pronominal subjects can remain in a structurally low subject position to the right of the surface position of the finite verb and that this option is available because a higher subject position above the finite verb can be occupied by an empty expletive. Fronting of a non-operator therefore leads to 'XP-V-S' orders. During the ME period, empty expletives start being lost and, as a consequence, non-pronominal subjects cannot remain in a low subject position any more but have to move to the subject position to the left of the finite verb. Thus, we obtain 'XP-S-V' orders. The loss

[16] The main exception here is Capgrave's Chronicle in which the frequency of inversion is almost twice as high with pronominal subjects as with full DP subjects. I have to leave it open here how this surprising pattern can be explained.

of subject-verb inversion is therefore the result of the loss of empty expletives in the history of English (cf. also Hulk & van Kemenade 1995:249 for the observation that the loss of V2 and the loss of empty expletives co-occur). As for the loss of empty expletives, the analysis in Haeberli (2000) is based on the standard assumption that the licensing of empty expletives depends on properties of the verbal inflectional morphology and it is therefore proposed that the loss of empty expletives is due to a change in the inflectional morphology in ME. More specifically, it is argued that it is the loss of the final /n/ in infinitives (cf. e.g. OE *andswaria**n***, EME *ontswerie**n***, late ME *answere* ('to answer')) which plays a crucial role here. In terms of such an analysis, the loss of subject-verb inversion can ultimately be reduced to the loss of the infinitival *–n* ending.

Given this conclusion, we now can return to the ME texts studied earlier. In general, *–n* infinitives have become very rare in these texts. Among the 33 samples studied, there are only 11 in which the frequency of *–n* infinitives is still higher than 3% and, even in those, the *–n* infinitive is generally the clear minority form. The most striking exception to this observation can be found in *The Mirror of St. Edmund (ms. Vernon).* In this text sample, 382 out of 469 infinitives (81.4%) have an *–n* ending, which is by far the highest frequency among the texts studied here. Thus, the development towards *n*-less infinitives only seems to be in its initial stages in this text. What is interesting for our purposes now is that *The Mirror of St. Edmund (ms. Vernon)* is also the text which has by far the lowest frequency of non-inversion in Tables 2 and 3. Thus, the highest frequency of *n*-infinitives coincides with the lowest frequency for the absence of subject-verb inversion. From the point of view of the approach proposed in Haeberli (2000), this observation is not surprising because it relates the loss of subject-verb inversion to the loss of *–n* infinitives. Since the latter change is only in its initial stages, there are also no developments yet with respect to the former change. The special status of *The Mirror of St. Edmund (ms. Vernon)* among the texts studied would thus be an illustration of factor (i) listed above for the variation with respect to subject-verb inversion, i.e. an illustration of a text which does not meet the necessary conditions for the loss of inversion yet.[17]

[17] Other texts which are ranked low with respect to subject-verb non-inversion in Tables 2 and 3 and which still have relatively high frequencies of *–n* infinitives are the following: *The Earliest English Prose Psalter* (46.2% non-inversion, 45.8% *-n*), *Chaucer* (50% non-inversion, 44.9% *-n*), *Reynes* (51.9% non-inversion, 18.1% *-n*), *Mandeville* (62.5% non-inversion, 29.7% *-n*), *Wycliffite Sermons* (66.3% non-inversion, 15.4% *-n*). Given the approach discussed in the text, the fact that non-inversion is not more frequent yet in these texts could be related to the fact that *–n* infinitives still seem to be fairly productive, i.e. the syntactic development has not made more progress yet because the morphological development is still under way.

It should be pointed out, however, that there are two texts which have similar frequencies of *–n* infinitives as *Reynes/Wycliffite Sermons* and one text which has a considerably higher frequency but they nevertheless also have relatively high frequencies of non-inversion. In *The Brut* and in *Gregory's Chronicle*, the frequency of infinitival *–n* endings is 18.3% and 12.7% respectively whereas the rate of non-inversion is 81% and 80.8% respectively. Thus, the loss of subject-verb inversion is well advanced although there are still more than just some isolated cases of infinitival *–n* endings. A detailed investigation of this contrast between *Reynes/Wycliffite Sermons* and *Brut/Gregory's Chronicle* would go beyond the scope of this paper. Let us therefore simply mention two points which may be relevant in this context. First of all, it seems plausible that in a transitional phase of a morphological and a related syntactic change, the patterns of usage are not directly linked. In other words, it may be possible that the writings of two authors are similar with respect to their morphological properties but that one author uses the syntax more conservatively whereas the other one makes more frequent use of the new syntactic option. And secondly, a more general problem may arise here, namely the question whether for example the occasional occurrence of an infinitival *–n* ending really reflects a phonologically represented ending that is still available or whether it just reflects a conservative spelling. If it is the latter, no syntactic consequences would be expected.

Let us now turn to the second factor that may be relevant for the inversion patterns found in some of the ME texts studied in Tables 2 and 3. The relevant text sample here is the one from William Caxton's *Reynard the Fox*. This text sample has the second lowest frequency of non-inversion in Table 3, namely 34.8%. What is interesting now is that another text sample attributed to William Caxton shows a completely different picture. In *Caxton's Prologues and Epilogues*, the absence of subject-verb inversion is the clear majority pattern with 82.6%. How can this contrast between two texts written by the same author be accounted for? A property of the first text is suggestive here. As observed in the text information of the Penn-Helsinki Corpus and as discussed in detail by Blake (1970), Caxton's *Reynard the Fox* is a translation from a Dutch original. At that time, Dutch was on its way to becoming the relatively rigid V2 language it is today (cf. e.g. Weerman 1989:183ff.) and it may therefore be that the Dutch source had an influence on the frequent use of inversion in *Reynard the Fox*. Although becoming marginal, inversion still was a grammatical option in late ME, and the frequency of its occurrence may thus sometimes have been influenced by a source text written in a language which makes frequent use of subject-verb inversion.[18]

Let us finally turn to a third factor which may play a role for variation in the frequency of subject-verb inversion in ME. Kroch & Taylor (1997) and Kroch, Taylor & Ringe (2000) show that a northern ME text from around 1400, *The Northern Prose Rule of St. Benet*, exhibits a fairly regular V2 syntax in which subject-verb inversion applies regardless of whether the subject is a pronoun or a full DP. Kroch et al. take this text as evidence for a dialect split with respect to the syntax of V2 in ME. They distinguish a northern dialect which has a regular V2 syntax with systematic subject-verb inversion from a southern dialect which is a continuation of the OE V2 system in which subject-verb inversion only occurs with non-

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Whereas the contrasts between *Reynes/Wycliffite Sermons* and *Brut/Gregory's Chronicle* is relatively small and therefore could well be due to one of the factors mentioned before, there is a third text, *The Book of Margery Kempe*, which still has infinitival *–n* endings and also high frequencies of non-inversion. However, in this text *–n* infinitives are not simply a marginal option occurring with frequencies around 15%, but they occur with a rate of 66.7%. In terms of the correlation mentioned in the text, the high frequency of *–n* infinitives would lead us to expect a subject-verb inversion pattern which is still close to OE/EME, i.e. with a relatively low frequency of non-inversion. Instead, we find a frequency of non-inversion of 83.3%.

This problem can be weakened a bit weakened once we consider the history of this text. As observed in the text information of the Penn-Helsinki Corpus, Margery Kempe "was apparently illiterate and her book was actually written by two amanuenses, the first an Englishman long resident in Germany, and the second, a priest… The whole was then copied by a scribe." (for more details cf. Meech 1940). Thus, both with respect to the syntax and with respect to the morphology/spelling it is uncertain whether we are really dealing with a unique source here. Instead, the various participants in the writing of this text (Margery Kempe and the writers/scribe) may have had an influence on its syntax and morphology. In this respect, it is interesting to observe that, although Meech (1940:ix) suggests that the first writers's "spelling, inflections and style were freely changed by the second", in the text sample from Book I which has been attributed to Margery's first writer (cf. Meech 1940) the *–n* infinitive is much less frequent (51%) than in the text sample from Book II which has been attributed to Margery's second writer (84.2%). Thus, the fact that the correlation between inversion and infinitival morphology suggested in the text does not seem to hold in *The Book of Margery Kempe* may be due to a situation in which the text actually does not reflect a single grammatical system.

[18] The same scenario may also hold for example for *The Book of Vices and Virtues* (non-inversion 40.5%). This text is a translation of the French work *Somme le Roi*, a text from the 13th century, i.e. from a period when French still showed V2 properties (cf. e.g. Roberts 1993, Vance 1997). Thus, we can find the following type of parallelisms between the French text and the ME text (examples taken from the passage given in Francis 1942:xlii):

(i) a. [Ce] nous **tesmoingne** *li roy, li prince, li conte et li empereur*… (*Somme le roi*)
That us witnesses the king, the prince, the count and the emperor
'The king, the prince, the count and the emperor are witnesses to this for us.'

b. And [þat] **witnesseþ** wel *þe kynges. þe erles. þe princes. and þe emperoures*…(*Vices and Virtues*)

pronominal subjects. In terms of this proposal, certain aspects of the subject-verb inversion syntax of ME could then be argued to be a manifestation of a grammar contact situation (cf. also Kroch, Taylor & Ringe 2000, Lightfoot 1997). In particular, properties of the regular V2 syntax of the north could have been introduced into the grammars of speakers of the south in a contact situation. Such a scenario would be particularly plausible for cases in which the OE/EME distinction between subject types is not maintained and pronominal and non-pronominal subjects have an similar status with respect to subject-verb inversion. A text sample which has this property is *The Mirror of St. Edmund (ms. Thornton)*, the text with the third lowest frequency of non-inversion with full DPs in Table 3 (35.4%; non-inversion with pronouns 47.5%). For this text, it could be argued then that subject-verb inversion has not decreased in the same way as in most other ME texts because, due to northern influence, a different system has been introduced which derives (optional) subject-verb inversion orders. This scenario would not be implausible given that *The Mirror of St. Edmund (ms. Thornton)* is a text of northern origin (cf. Perry 1914).[19] Thus, certain frequency variations in Tables 2 and 3 may be due to varying degrees of influence of the northern V2 syntax.

In summary, we have seen in this section that by the 15th century subject-verb inversion in clauses with a fronted non-operator and a full DP subject has become the clear minority pattern in most of the ME text samples studied. However, the loss of subject-verb inversion is not completed yet at the end of the ME period and instances of inversion still can regularly be found in all ME texts (cf. also Bækken 1998 for a detailed discussion of the further developments concerning inversion in Early Modern English). As for the contexts in which the remaining cases of subject-verb inversion occur, it is relatively difficult to determine them very clearly at this point. I have shown, however, that certain contexts such as passivization may favor the occurrence of a subject in a position following the finite verb. With respect to the type of fronted element or the type of subject in inversion constructions, a wide range of elements can be found in inversion constructions. The most striking property of inversion in the later ME texts from a diachronic point of view is the fact that even pronominal subjects start occurring in inversion constructions fairly regularly in most texts. Finally, I discussed some possible explanations for the variation that can be found among the different ME texts with respect to the frequency of (non-)inversion in contexts of non-operator fronting. I proposed that low frequencies of non-inversion in certain texts may be the result of a situation in which the grammatical conditions for the loss of inversion are not met yet, of the influence of a source text in a translation or of grammar contact.

4. CONCLUSION

The aim of this paper was to give a general overview of the loss of V2 or, more precisely, the loss of subject-verb inversion in clauses with a fronted non-operator and a full DP subject in

[19] A similar explanation could hold for Chaucer's text sample which has the same properties as *The Mirror of St. Edmund (ms. Thornton)* (low frequency of non-inversion, similar frequencies of non-inversion with pronominal and non-pronominal subjects). The similarity between Chaucer's syntax and the northern V2 system has already been observed by Kroch & Taylor (1997:324, fn. 16). Assuming that the northern dialect reflects Scandinavian influence, they conclude that "Chaucer's syntax may be of a piece with his East Midlands phonology, since the East Midlands were part of the Danelaw. His language may, therefore, indicate a certain conservative regionalism compared to the developing London standard."

Note that if a scenario along these lines can be maintained, the factors discussed in the text would account for the low frequency of non-inversion for all the six texts in which non-inversion is still 50% or lower in Table 3 (*The Mirror of St. Edmund (ms. Vernon)* and *The Earliest English Prose Psalter*: productive infinitival *–n* ending (cf. text and fn. 17); *Reynard the Fox* and *Book of Vices and Virtues*: translations (cf. text and fn. 18); *The Mirror of St. Edmund (ms. Thornton)* and Chaucer: grammar contact).

the history of English. Based on data taken from two parsed corpora, I have shown that the absence of subject-verb inversion is already fairly frequent in OE and that by the 15th century inversion has become the clear minority pattern in most texts although there is still considerable variation among different texts.

The findings in this paper raise several additional questions: (i) How can the situation in OE be analyzed in theoretical terms given that OE has a V2 syntax which is far less rigid than the one found in Modern Germanic? (ii) How can the loss or at least the drastic decrease of subject-verb inversion in the ME period be explained? (iii) How can the late ME inversion patterns be analyzed given that V2 also occurs with pronominal subjects? (iv) An issue which was mentioned in this paper but which has not been dealt with conclusively here: Are there any factors which determine or at least favor the absence of inversion in OE or favor the occurrence of the remaining inversion cases in ME? Issues (i) to (iii) are addressed in Haeberli (2000). As for issue (iv), further research will be necessary which has to be based in particular on more detailed statistical evidence and on additional and larger text samples.

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